1. A method for interconnecting elements of a network using an LDT
interface in a defined network topology, comprising the steps of:

    interconnecting a plurality of integrated circuits in a multi-dimensional
network configuration using an LDT interface;

    wherein at least one of said integrated circuits has more than two LDT
interfaces; and

    wherein said integrated circuits are interconnected without requiring an
LDT switch.

2. The method of Claim 1, wherein each integrated circuit comprises at least
four LDT interfaces.

3. The method of Claim 1, further comprising the step of:

    assembling integrated circuits having four LDT interfaces into a two-
dimensional mesh.

4. The method of Claim 1, further comprising the step of:

    linking integrated circuits having four LDT interfaces into a PLEX
topology.

5. A network comprised of elements using an LDT interface in a defined
network topology, comprising:

a plurality of integrated circuits connected in a multi-dimensional network configuration using an LDT interface;

wherein at least one of said integrated circuits has more than two LDT interfaces; and

wherein said integrated circuits are interconnected without requiring an LDT switch.

6. The network of Claim 5, wherein each integrated circuit comprises at least four LDT interfaces.

7. The network of Claim 5, wherein said integrated circuits each comprise four LDT interfaces.

8. The network of Claim 7, wherein said integrated circuits are assembled into a two-dimensional mesh.

9. The network of Claim 7, wherein said integrated circuits are linked into a PLEX topology.